

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) ~~An~~ A biologically pure culture of an endophyte of the *Neotyphodium coenophialum* species, selected from the group consisting of: AR512; AR513; AR514; AR517; AR521; AR522; AR524; AR525; AR535; AR539; and combinations thereof; AR512; AR513; AR514; AR517; AR521; AR522; AR524; AR525; AR535, AR539 being cultures deposited on 2 October 2002 at the Australian Government Analytical Laboratories (AGAL) with accession numbers: NM02/31935; NM02/31936; NM02/31937; NM02/31938; NM02/31939; NM02/31940; NM02/31941; NM02/31942; NM02/31943; NM02/31944;

characterised in that, ~~in combination with a host grass, said when the endophyte is combined with a host grass, the endophyte does not cause symptoms of produce alkaloid compounds at levels associated with toxicosis in animals;~~

and further characterised in that when the endophyte is combined with a host grass, the endophyte produces retains sufficient levels of at least two clavine alkaloids selected from the group consisting of: agroclavine; setoclavine; isosetoclavine; and combinations thereof that protect the host grass from pests or abiotic stresses or both;
and further characterised in that the host grass is artificially inoculated with the endophyte.

2. (Currently Amended) ~~An~~ The endophyte culture as claimed in claim 1[~~1~~]
characterised in that the endophyte does not produce alkaloid compounds at levels
associated with toxicosis is fescue toxicosis.
3. (Currently Amended) ~~An~~ The endophyte culture as claimed in claim 1 or claim 2,
characterised in that the endophyte does not produce ergovaline alkaloid at a level
associated with toxicosis is caused by ergovaline.
4. (Currently Amended) ~~An~~ The endophyte culture as claimed in claim 2 or claim 3
characterised in that the endophyte produces a level of ergovaline that is less than 0.4
ppm in dry matter in herbage consumed by grazing animals.
5. (Currently Amended) ~~An~~ The endophyte culture as claimed in either claim 3 or 4,
characterised in that the endophyte produces a level of ergovaline that is less than 0.4
ppm in dry matter in herbage, other than the crown of the host grass ~~plant~~, consumed
by grazing animals.
6. (Currently Amended) ~~An~~ The endophyte culture as claimed in any one of the
preceding claims characterised in that claim 1 characterised in that the endophyte
produces sufficient levels of at least two clavine alkaloids to protect the endophyte and
the host grass from pests or abiotic stresses or both the abiotic stress is a water deficit.
7. (Currently Amended) ~~An~~ The endophyte culture as claimed in claim 6 of
~~*Neotyphodium coenophialum* species, selected from the group consisting of: AR512;~~
~~AR513; AR514; AR517; AR521; AR522; AR524; AR525; AR535; AR539; and~~
~~combinations thereof; AR512; AR513; AR514; AR517; AR521; AR522; AR524; AR525;~~

~~AR535, AR539 being cultures deposited on 2 October 2002 at the Australian Government Analytical Laboratories (AGAL) with accession numbers: NM02/31935; NM02/31936; NM02/31937; NM02/31938; NM02/31939; NM02/31940; NM02/31941; NM02/31942; NM02/31943; NM02/31944;~~

~~characterised in that, in combination with a host grass, said endophyte culture does not cause symptoms of toxicosis in grazing animals;~~

~~and further characterised in that the clavine said endophyte culture retains sufficient levels of at least two alkaloids selected from the group consisting of: agroclavine; setoclavine; isosetoclavine; and combinations thereof, that characterised in that the clavine alkaloids protect the endophyte and host grass from pests or abiotic stresses wherein the abiotic stress is a water deficit or both;~~

~~and further characterised in that the host grass is artificially inoculated with the endophyte culture.~~

8. (Currently Amended) ~~An~~ The endophyte culture as claimed in claim 7-1 characterised in that the endophyte biologically pure culture of the endophyte is an axenic culture.

9-29. (Canceled)

30. (New) A biologically pure endophyte culture selected from the group consisting an endophyte culture deposited with the Australian Government Analytical Laboratories under accession number NM02/31935; NM02/31936; NM02/31937; NM02/31938; NM02/31939; NM02/31940 ; NM02/31941; NM02/31942; NM02/31943; and NM02/31944.

31. (New) The endophyte culture of claim 30, wherein the culture is an axenic culture.

32. (New) A biologically pure culture of an endophyte of the *Neotyphodium coenophialum* species, wherein the endophyte has a first B11 allele of about 128 base pairs in size and a second B11 allele within the range of about 192 to about 200 base pairs in size, and wherein the endophyte has three B10 alleles, each within the range of 154 to 185 base pairs in size.

33. (New) The endophyte culture of claim 32, wherein the culture is an axenic culture.